IVANOV, Yevgeniy Konstantinovich; GLAZOV, G.A., prof., red.;
    YEMEL'YANOVA, Ye.V., red.; PRESNOVA, V.A., tekhn. red.

    [Organization and technological processes of multiple machin-
    ing] Organizatsiia i tekhnologiia gruppovogo proizvodstva.
    Leningrad, Lenizdat, 1963. 154 p.   (MIRA 16:9)
        (Metal cutting)

GLAZOV, G.A., inzh., red.; GUSHCHIN, V.F., kand. tekhn. nauk, red.;
KUREPINA, G.N., red. izd-va; CHFAS, M.A., red. izd-va;
BORDINA, A.A., tekhn. red.

[Overall mechanization and automation of the serial production
of machinery]Kompleksnaia mekhanizatsiia i avtomatizatsiia v
seriinom mashinostroenii. Moskva, Mashgiz, 1962. 174 p.
(MIRA 15:11)

(Machinery industry) (Automation)

GLAZOV, G. A.

Skorostnye metody narezaniia rez'by; opyt zavoda im. Molotova. Pod red. A. N. Ogloblina. Leningrad Leningradskoe gazetno-zhurnal'noe i knizhnoe izd-vo, 1948. 57 p. illus.

High-speed methods of threading; experience of the Molotov plant.

DLC: TJ1225.G55

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

POLITOV, Igor' Vladimirovich; KUZNETSOV, Nikolay Antonovich;
KURIYANOVA, O.V., red.; GLAZOV, G A., ;red.,

[Vibratory machining of parts for machines and instru-
ments] Vibratsionnaia obrabotka detalei mashin i priborov.
Leningrad, Lenizdat, 1965. 124 p.   (MIRA 18.10)

YAKHIMOVICH, D.F.; BLITSHTEYN, N.I.; GLAZOV, G.I.

The 4270-type ultrasonic metal-cutting machine. Biul.tekh.-ekon.
inform. no.1:33-34 '59.   (MIRA 12:2)
(Ultrasonic waves--Industrial Applications) (Metal cutting)

BLITSHTEYN, N.I.; GLAZOV, G.I.; YAKHIMOVICH, D.F. (Moskva)

New ultrasonic tool (model 4770). Akust.zhur. 5 no.1:117-118 '59.
(MIRA 12:4)
(Ultrasonic waves--Industrial applications)
(Drilling and boring machinery)

L 21105-65

ACCESSION NR: AP4049881

oil, filtration rate of the solvents, solidification temperature of the oil) was determined. A detailed study was made of the dependence of the yield of relatively oil-free paraffin on the filtration temperature of the solution and on the acetone content of the solvent mixture. The following conclusions were reached. In dewaxing distillate raffinates of Korobkovo petroleum by feeding of the solvent to the stock in portions, the characteristics of the process are improved by: (1) decreasing the temperature of mixing of equally cooled first

ACCESSION NR: AP4026848   S/0065/64/000/004/0016/0021

AUTHORS: Glazov, G.I.; Unksova, L.Ye.; Fal'kovich, M.I.; Chernozhukov, N.I.

TITLE: Intensifying the process of deparaffination of distillate raffinates

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 4, 1964, 16-21

TOPIC TAGS: raffinate, deparaffination, solvent, deparaffination intensification, batch solvent addition, acetone toluene solvent, high acetone solvent

ABSTRACT: The possibility of intensifying the deparaffination of raffinates by adding a solvent containing 60% or more acetone to the crude oil at the start of the dilution was verified. Experiments were run comparing a single addition with three batch-wise additions of solvent to the basic crude oil (a wide fraction of raffinate with 6.7 centistokes viscosity at 100C, with 90% potential oil content) to be deparaffinated; acetone-toluene was the solvent;

ACCESSION NR: AP4026848

the cooling rate was 100-120C/hour, and filtration was at -25C
under 400 mm. Hg. The solvent added initially to the crude oil
should contain 60-80% acetone. The amount of solvent used and its
temperature affect the deparaffination process. For the second
dilution the solvent was fed to the cooled crude oil at 0-15C in
such amounts thast the overall acetone content in admixture with
the toluene is 45-50%. The third portion of solvent was added to
the solution cooled to nearly the filtering temperature in such
amounts that the acetone content in the total solvent after all
three stages of addition was 30%. The batch-wise addition of the
acetone-containing solvent in comparison to the single stage
addition of solvent to the crude oil is more economical, giving a
larger amount of oil with a higher paraffinic-naphthenic content
and reduced aromatics and resins. The use of a solvent containing
over 60% acetone permitted effective deparaffination of broad
distillate fractions with viscosities up to 10 centistokes at 100C.
Recovery of the deparaffinated oil was increased 3-5% and the rate of

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ACCESSION NR: AP4026848

filtration was increased by 70%. In narrow distillate fractions obtained on a vacuum column by boiling up to 460C, the results of deparaffination seem independent of the method of solvent addition. In the high boiling fraction, 450-480C, the batch-wise additon was again more favorable, giving a higher yield of oil and a more porous filter cake. Orig. art. has: 4 tables and 2 figures.

ASSOCIATION: MINKh i GP im. I. M. Gubkina (Moscow "Order of the Red Banner of Labor" Institute of the Petrochemical and Gas Industry)

SUBMITTED: 00   DATE ACQ: 28Apr64   ENCL: 00

SUB CODE: FL   NR REF SOV: 002   OTHER: 001

Card   3/3

GLAZOV, G.I.; KARTININ, B.N.; CHERNOZHUKOV, N.I.

    Structure of the solid hydrocarbons of distillation raffinates.
Khim. i tekh. topl. i masel 10 no.10:18-23 O '65.
(MIRA 18:10)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut
neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina.

AUTHOR: Glazov, G. N.

TITLE: Accuracy of determining the parameter S of distribution of meteoroid masses by radar 24

CITED SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 1, 1963, 164-176

TOPIC TAGS: radar, meteoroid, meteoroid mass

TRANSLATION: The distribution patameter S is regarded as a constant independent of the meteoroid mass. This parameter is determined by radar methods. Methods of determining S are described which are based on comparing the number of meteoroids

L 7699-66   EWT(d)/FSS-2/EWT(1)/EWA(d)   GW
ACCESSION NR: AR5022995

IR/0269/65/000/008/0047/0047
523.164.8
50

SOURCE: Ref. zh. Astronomiya, Abs. 8.51.419

AUTHOR: Glazov, G.N.

TITLE: Distribution of the sum of the duration of a radio-echo from unsteady-type meteoric trails

CITED SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 3, 1964, 3-10

TOPIC TAGS: astronomic data, meteor-trail, radio astronomy

TRANSLATION: The function is found for the distribution of the sum of the duration of a radio-echo from unsteady-type meteoric trails. With a sufficiently sensitive system the number of unsteady-type trails used for communication may be many time greater than the number of steady-type trails used. The distribution function is determined for a fixed number of echoes and for a fixed observation period. In each of these cases, two variants examined separately: the distribution of the sum of the duration of reflections from the moment the trails is

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L 7699-66
ACCESSION NR: AR5022995

formed (non-truncated distribution) and the distribution of the sum of the dura-
tion of registered reflections (truncated distribution), which is necessary if
the locator fixes a signal of longer duration than a certain minimal one. Orig.
art. has: 5 references.

SUB CODE: AA   ENCL: 00

Card 2/2

AUTHOR: Glazov, G. N.

TITLE: Consideration of nonisothermality of the atmosphere in a meteoric zone

CITED SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 3, 1964, 11-17

TOPIC TAGS: nonisothermal atmosphere, meteoric zone, electron density, isothermal model, nonisothermal model

TRANSLATION: The necessity is pointed out of taking into account the nonisothermality of the atmosphere when determining the numerical values of the .... of

Card 1/2

L 60404-65

ACCESSION NR: AR5016446

scatter of the distribution of the altitudes of maximum electron density is de-
creased. A correspondence is found between the length of the meteor trail dur
thermal and nonisothermal

... . in the isothermal model.

SUB CODE: ES

ENCL: 00

Card 2/2

L 9186-66   EEC(k)-2/EWA(h)/EWT(d)/EWT(1)/EWA(d)/FSS-2   GW/WS-2/WR

ACC NR: AR6000137   SOURCE CODE: UR/0058/65/000/008/H057/H057

SOURCE: Ref. zh. Fizika, Abs. 8Zh389

AUTHOR: Glazov, G. N.

ORG: none

TITLE: Time overlap of meteoric radio echoes

CITED SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 3, 1964, 18-26

TOPIC TAGS: meteor trail, statistic distribution, radar reflection, radio echo

TRANSLATION: Statistical relations are derived for the time distribution of the number of overlaps of meteoric radio echoes, for the length of the overlap time, and for the average total overlap duration, without specifying concretely the stable and unstable character of the trails. Stable and unstable echoes are then regarded as particular cases. Knowledge of these statistical quantities is essential for a correct interpretation of the results of meteoric radio communication and meteor observation, since the time overlap of the echoes decreases the total communication time and distorts the received signal as a result of multipath propagation. The number of overlaps within a time T has a Poisson distribution. The probability density of the overlap is related approximately linearly to the integral distribution function of the echo durations and is a monotonically decreasing function. G. S.

SUB CODE: 09

Card 1/1

L 24256-66   FSS-2/EWT(1)/EWA(d)   GW/WR

ACC NR: AR6005264   SOURCE CODE: UR/0058/65/000/009/H052/H052

32

B

AUTHORS: Glazov, G. N.; Lazarev, R. G.

TITLE: One statistical method of determining the radiants of meteor streams

SOURCE: Ref. zh. Fizika, Abs. 9Zh368

REF. SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 3, 1964, 163-164

TOPIC TAGS: meteor stream, meteor radiant, meteor burst communication, radar reflector

ABSTRACT: In connection with the fact that in radar observations it is impossible in many cases to separate the meteors of the streams from the sporadic ones, and the "normal" reflections from the "abnormal" ones, it is proposed that the basis for the statistical method of determining the radiants of the meteor streams be chosen to be not the smallest /values of the slant ranges of the meteors, but the average values. P. B. [Translation of abstract]

SUB CODE: 03

Card 1/1

L 29430-66   EWT(1)/FCC   GW

ACC NR: AR5023010   SOURCE CODE: UR/0269/65/000/008/0067/0067

AUTHOR: Glazov, G. N.

TITLE: Evaluation of the non-isothermal property of the atmosphere in the meteor zone

SOURCE: Ref. zh. Astronomiya, Abs. 8.51.584

REF SOURCE: Tr. Tomskogo in-ta radioelektron, i elektron, tekhn., v. 3, 1964, 11-17

TOPIC TAGS: astronomic data, meteor trail, atmospheric temperature

ABSTRACT: A correlation was found for the length of a meteor trail in an isothermal and in a non-isothermal atmosphere model. In the non-isothermal, the length of the trail was somewhat shorter than in the isothermal one. Orig. art. has: 11 references.

SUB CODE: 03 / ORIG DATE: none

Card 1/1   UDC: 523.58

L 46758-66   EWT(d)/ESS-2/EWT(1)   IW

TRANSLATION: A distribution function is found for the sum of durations of radio echoes from unsteady meteor trails. With a sufficiently sensitive system, the communication time for unsteady trails can exceed the lifetime of steady trails by many times. The distribution function is determined for a fixed number of echoes when the sum of durations is a random value equal to the sum of a fixed number of random values. The distribution function is also determined for a fixed observation time when the sum of durations is a random value equal to the sum of a random number of random terms. Two variants are considered in each of the above cases. One is the distribution of the sums of echo durations from the instant the trail is formed (a nontruncated distribution). The other variant is the distribution of the sums of the recorded echoes (a

UDC: 621.396.228.34

Card 1/2

L 46753-66
ACC NR: AR6004327

truncated distribution) which is applied only if the echo has a duration greater than a certain minimum time. 5 references. G. S.

SUB CODE: 03,17/   SUBM DATE: none

Card 2/2   mt

ACC NR: AT6033990   SOURCE CODE: UR/3227/64/003/000/0003/0010

AUTHOR: Glazov, G. N.

ORG: none

TITLE: Distribution of the sum of durations of radio echo coming from unstable
meteor trails

SOURCE: Tomsk. Institut radioelektroniki i elektronnoy tekhniki. Trudy, v. 3,
1964, 3-10

TOPIC TAGS: meteoric burst communication, meteor trail

ABSTRACT: As meteoric burst communication is largely based on unstable
meteor trails, only such trails and their echoes are considered in this article.
The distribution of durations in the case of return scattering is determined,
apparently, the derived formulas can be generalized to cover the case of slanted

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ACC NR: AT6033990

scattering. The distribution of unstable-echo durations obeys an exponential law. The sum of echo durations or communication durations is regarded as a random quantity. These two cases are distinguished: (1) Fixed number of echoes; the sum of durations is a random quantity equal to a sum of a fixed number of random quantities; (2) Fixed observation time; the sum of durations is a random quantity equal to a sum of a random number of random addends; with a fixed unit interval of observation time, the distribution of the sum of durations will yield the distribution of the fill factor. Both determinations, complete (sums of echo durations from the moment of trail formation) and truncated (sums of recorded-echo durations), are considered. Formulas for probability densities, integral distribution functions, mathematical expectations, and root-mean-square deviations are derived. Orig. art. has: 66 formulas.

SUB CODE: 17 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 001

Card 2/2

ACC NR: AT6033991   SOURCE CODE: UR/3227/64/003/000/0011/0017

AUTHOR: Glazov, G. N.

ORG: none

TITLE: Allowance for anisothermality of the atmosphere in a meteor zone

SOURCE: Tomsk. Institut radioelektroniki i elektronnoy tekhniki. Trudy, v. 3, 1964, 11-17

TOPIC TAGS: upper atmosphere, atmospheric property, meteoric ionization

ABSTRACT: A. A. Weiss, in his theory of the radio-echo meteor-height distribution in an anisothermal atmosphere (Austr. J. Phys., v. 12, no. 1, 54, 1959), identified the reflecting-point height with the height of the maximum linear electron density; he also neglects the effect of range on minimum detectable electron density and assumes a uniform distribution of radiants of sporadic background. He finds the height-distribution moments by direct integration of the distribution, which results in a very complicated relation between moments and temperature gradient. The present article determines the relation between individual maximum-ionization heights of two models

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ACC NR: AT6033991

of the atmosphere by comparing corresponding equations describing the atmospheres. Thus, approximate relations between the moments (dispersions) of height distributions are found without any derivation of the height distribution in an anisothermal atmosphere. These relations are simple and permit determining the systematic error in parameter s found from height distribution; thus, the allowance for anisothermality is as valid as the method itself of determining s from height distribution. It is found that, due to the atmosphere anisothermality, the real mean-square deviation of the height distribution is smaller than its theoretical value determined by T. R. Kaiser (M.N.R.A.S., 114, no. 1, 52, 1954). This permits correcting parameter s determined from an experimental height distribution. Orig. art. has: 1 figure and 30 formulas.

SUB CODE: 04 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 007

Card 2/2

L 46757-66   EVT(d)/FSS-2/EWT(1)   GW

ACC NR: AR6004328   SOURCE CODE: UR/0274/65/000/009/A033/A033

AUTHOR: Glazov, G. N.

REF SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., v. 3, 1964, 18-26

TITLE: Overlap on meteoric radio echoes in time

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 9A244

TOPIC TAGS: radio echo, meteoric burst communication

TRANSLATION: A statistical relation is found for the distribution of the number of
overlaps of meteoric radio echoes in time, for duration of overlap, and for the average
total duration of overlap irrespective of the character of the trails (steady or un-
steady). Steady and unsteady echoes are subsequently considered as special cases. The
number of overlaps in time T is a Poisson distribution. The overlap density probabi-
lity is roughly a linear function of the integral of the distribution function of echo
duration and is a monotonically decreasing function. 7 references. G. S.

SUB CODE: 03,17/   SUBM DATE: none

UDC: 621.396.228.34

Card 1/1

ACC NR: AT6033992   SOURCE CODE: UR/3227/64/003/000/0018/0026

AUTHOR: Glazov, G. N.

ORG: none

TITLE: Overlapping durations of meteor radio echoes

SOURCE: Tomsk. Institut radioelektroniki i elektronnoy tekhniki. Trudy, v. 3, 1964, 18-26

TOPIC TAGS: meteor trail, meteoric burst communication

ABSTRACT: The echo-duration overlapping (a) cuts down the total communication time and causes signal distortion in meteoric-burst communication systems and (b) interferes with meteor observation by radar. Hence, the author tries to find statistical relations among overlap distributions, overlap duration, total overlap time, probability of individual echo overlap, etc. In the distribution of the number

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ACC NR: AT6033992

of overlaps, D. W. R. McKinley's results are used (Can. J. Phys., 32, 450, 1954). It is found that the number of overlaps during a period T is distributed according to the Poisson law. The mean relative number of overlaps is equal to the mean fill factor. The logarithm of probability of nonoverlapping a given echo is linearly connected with the echo duration and with the mean fill factor. The probability density of overlap duration is quasi-linearly connected with the integral function of echo-duration distribution and is a monotonously decreasing function. The overlap-caused correction to the fill factor is of the same order of magnitude as the square of the fill factor. Orig. art. has: 52 formulas.

SUB CODE: 17 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 003

Card 2/2

GLAZOV, I.

GLAZOV, I.M.

The ranks of innovators are growing. Avtom.,telem.i sviaz'
no.6:25 Je '57. (MLRA 10:7)

1. Inzhener Grebenkovskoy distantsii signalizatsii i svyazi
Yuzhnoy dorogi.
(Railroads--Maintenance and repair)

GLAZOV, I.M., inzh.

Simplified circuit for railway crossing warning signals. Avtom.,
telem. i sviaz' 2 no.3:16 Mr '58.   (MIRA 13:1)

1.Grebenkovskaya distantsiya signalizatsii i svyazi Yuzhnoy dorogi.
                    (Railroads--Crossings)

GLAZOV, I.M., inzh.

This was realized by the efficiency promoters of the Grebenkovskiy
section. Avtom., telem. i sviaz' 2 no.5:29 My '58.   (MIRA 11:5)

1.Grebenkovskaya distantsiya signalizatsii i svyazi Yuzhnoy dorogi.
         (Telephone—Maintenance and repair)

GLAZOV, I.M., inzh.; YAREMENKO, M.V.

We are utilizing depleted electrolyte in V.D. cells. Avtom.,
telem. i sviaz' 7 no.8:36 Ag '63.   (MIRA 16:9)

1. Grebenkovskaya distantsiya signalizatsii i svyazi Yuzhnoy dorogi
(for Glazov). 2. Starshiy elektromekhanik Grebenkovskoy distantsii
signalizatsii i svyazi Yuzhnoy dorogi (for Yaremenko).
                    (Railroads--Electric equipment)

GLAZ , .

In the
4]

GLAZOV, M.G.

Drilling practices and power comsumption in core drilling. Mat.
po geol.i pol.iskop.TSentr.Kazakh. no.2:129-137 '62.

(MIRA 15:12)

(Core drilling)

GLAZOV, M.N.

Converter of electric voltage to the angle of shaft turn and
digital number-pulse code. Izv. vys. ucheb. zav.; prib. 8
no.5:75-79 '65.   (MIRA 18:10)

1. Leningradskiy elektrotekhnicheskiy institut imeni Ul'yanova
(Lenina). Rekomendovana kafedroy tekhnologii i konstruirovaniya
elektropriborostroyeniya.

GLAZOV, N.M.

Percentage of taper in relative altitudes as an index of the trunk forms of trees. Soob. DVFAN SSSR no.18:93-96 '63. (MIRA 17:11)

1. Dal'nevostochnyy filial imeni Komarova Sibirskogo otdeleniya AN SSSR.

BURTAKOV, V.S.; GLAZOV, M.I.

Current transformer operation at high power output, Elektrichestvo
no.2:59-61 F '58.   (MIRA 11:2)

1. Moskovskiy energeticheskiy institut.
                    (Electric transformers)

50 c

L 41122-65   EWT(d)/EWP(c)/EWP(v)/T/EWP(k)/EWP(1)   Pf-4
ACCESSION NR: AP5004677   S/0115/64/000/009/0058/0059   70
                                                                           18
                                                                           B
AUTHOR: none

TITLE: Fourth scientific and technical conference on "Cybernetics for the improvement of measurement and inspection methods"

SOURCE: Izmeritel'naya tekhnika, no. 9, 1964, 58-59

TOPIC TAGS: cybernetics, electric measurement, electric quantity instrument, digital computer, electronic equipment, electric engineering conference

ABSTRACT: The conference was held 1-4 July at the All-Union Scientific Research Institute of Metrology by the Section of Electrical Measurements of the Council on the Problem of "Scientific Instrument Making" of the State Committee on Coordination of Scientific Research Work in the USSR together with the All-Union Scientific Research Institute of Electrical Measurement Instruments and the Leningrad Regional Administration of the Scientific and Technical Division of the Instrument Making Industry. More than 400 delegates from 29 cities of the country participated. Fifty-seven reports were heard and discussed. Reports were given by: P. V. NOVITSKIY (Leningrad)--"Definition of the Concept of Informational Error in Measurement and its Importance in Practical Use" and "On the Problem of the Average Informational Criterion of Accuracy Throughout the Entire Scale of an Instrument"; Ya. A.

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L 41182-65
ACCESSION NR: AP5004677   17

ZUPERSCHMIDT (Moscow)--"On Determination of the Criteria of Accuracy for Measurement Devices"; S. M. MANDEL'SHTAM (Leningrad)--report on a new criterion of accuracy of measurement instruments; P. F. FARSHIN (Leningrad)--report on optimization when using Fourier transforms on electronic digital computers; S. P. DMITRIYEV, G. Ya. DOLGINTSEVA and A. A. IGNATOV (Leningrad)--proposal of a new method for solving problems of optimum filtering for non-stationary random signals and interferences; I. B. CHILPANOV--"Calculation of the Dynamic Characteristics of an Optimum Complex Two-Channel System which Uses Signals from a Position Meter and from a Speed Meter"; R. A. POLUEKTOV (Leningrad)--"Optimum Periodic Correction in the Measurement of Continuous Signals"; S. F. ADAMOVICH (Moscow)--"Analysis and Construction of Devices for Correction of Non-linearity and Scaling for Unitary Codes; G. V. GORBLOVA (Taganrog)--"A Method for Statistical Optimization in Graduating the Scales of Electrical Measuring Instruments"; V. A. ZHUL'MAN (Moscow)--"Analog-Digital Voltage Converter with Automatic Error Correction"; B. N. MALINOVSKIY, V. S. KALENCHUK and I. A. YANOVICH (Kiev)--"Automatic Monitoring of the Parameters of the Electrical Signals of Complex Radio and Electronic Equipment"; V. P. PEROV (Moscow)--"Operational Cybernetics as an Independent Scientific Specialization"; Ye. N. OIL'89 (Leningrad)-- "On the Problem of Effective Non-linear Scales"; A. I. MARKELOV (Moscow)--"Devices for Preliminary Processing of the Results of Measurements Presented in the Form of

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Graphic Recordings For Subsequent Introduction of the Information into Universal Digital Computers"; O. M. MOGILEVER and S. S. SOKOLOV (Leningrad)--"On a Method for Reducing Excess Information"; T. V. NIKOLAYEVA (Leningrad)--"A Device for Temporal Discretization of Continuous Signals"; A. A. LYOVIN and M. L. BULIS (Moscow)-- "Optimization of the Transmission of Telemetric Information as a Means for Raising the Efficiency and Eliminating Interference"; D. E. GUKOVSKIY (Moscow)--"On a Statistic Approach to the Detection of Events in Automatic Inspection"; M. I. LANIN (Leningrad)--"Method for Calculating the Holding Time of Communications in a Centralized Inspection System or Constant Servicing Time"; O. N. BROVSHTSYN, A. L. RAYKIN and V. V. RYKOV (Moscow)--"On a Single-Line Mass Service System with Losses"; V. M. SHLYANDIN (Penza)--report on circuit designs for direct compensation electrical digital measuring instruments; A. N. KOMOV (Novocherkassk)--report on a new method for compensation of digital bridges; M. N. GLAZOV (Leningrad)--report on the problem of voltage-to-angular rotation conversion; V. S. GUTNIKOV (Leningrad)--"Methods for Construction of Frequency Capacitance Pickups with a Linear Scale"; R. Ya. SYROPYATOVA and R. R. KHARCHENKO (Moscow)--report on the determination of the amplitude-frequency and phase characteristics of PFM and PWM modulators; Ye. I. TENYAKOV (Novocherkassk)--"The Phototransistor as a Switch for Electrical Measurement Purposes"; N. V. MALYGINA (Leningrad)--a report on ways for making universal equipment for measurement of current, voltage and power; P. P. ORNATSKIY and V. I. ZOZULYA (Kiev)--reports on the construction of static voltmeters, wattmeters and

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ACCESSION NR: AP5004677   15

phase motors; A. V. TRIKHANOV, I. G. SMYSHLYAYEV, N. I. SABLIN, V. M. RAZIN and V. A. GORBUNOV (Tomsk)--report on a device for automatic processing of the measurements of vibration amplitude of pneumatic hammers; L. K. RUKINA and V. G. KNORRING (Leningrad) --report on the development of a digital compensator for measuring pressure, force, etc.; N. B. DADUKINA (Leningrad)--report on a method for constructing frequency pickups for gas analysis; Yo. M. KARPOV, V. A. BRAZHNIKOV and B. Ya. LIKHTTSINDER (Kuybyshev)--reports on analysis and recording of boring speeds; Yu. V. TSHESNICHNIKOV (Kuybyshev)--"A High Speed Voltage-to-Digital Code Converter for ac Pickups"; G. P. VIKHROV and V. K. ISAYEV (Vilna)--"A Highly Accurate Digital Peak-to-Peak Voltmeter"; and S. M. PERSIN (Leningrad)--"A Low Level Analog-Digital Voltage Converter."

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: EE, EC

NO REF SOV: 000   OTHER: 000   JPRS

mll

Card 4/4

GLAZOV, N.M.

Factors determining the differences in the variation of the diameters and heights of Daburian larch trees. Soob. DVFAN SSSR no.21:39-43 '63.   (MIRA 18:6)

1. Biologo-pochvennyy institut Dal'nevostochnogo filiala Sibirskogo otdeleniya AN SSSR.

AUTHOR: Glazov, M. N.

ORG: Leningrad Electrotechnical Institute (Leningradskiy elektrotekhnicheskiy institut im. V. I. Ul'yanov (Lenin))

TITLE: Voltage-to-angle digitalizer

SOURCE: IVUZ. Priborostroyeniye, v. 8, no. 5, 1965, 75-79

TOPIC TAGS: analog digital converter, digitalizer, ELECTROMECHANIC CONVERTER, SERVOSYSTEM

ABSTRACT: An electromechanical voltage-to-angle-to-code converter is considered which is based on a servosystem with a stepping motor whose turn angle depends on the number of pulses fed to its control windings. Two block diagrams are shown which differ by the method of obtaining the feedback signal; in one version, the feedback is effected by an electromechanical angle sensor

UDC: 621.317.7.083.5

Card 1/2

L 34865-66

ACC NR: AP6009177

coupled to the stepping-motor shaft; in the other version, a digital-analog converter shapes the feedback signal depending on the number of pulses received by the control windings of the stepping motor. In both versions, the level quantization of the input signal is effected without any special coder, which fact simplifies the converter circuit. A laboratory model exhibited stable operation with supply voltage or frequency variation of $\pm 15\%$. The static error of the angle and digital outputs was 1% or less of the maximum input signal (± 250 mv; source resistance, 500 ohms or lower). Full-scale pointer deflection time, 5 sec. Minimum input signal, 10 mv. Orig. art. has: 2 figures.

SUB CODE: 09 / SUBM DATE: 01Jul64 / ORIG REF: 003

Card 2/2   vmb

KOTIK, V.G.; GLAZOV, N.P.

Determination of the optimal distance between the pipeline and the anodic grounding. Stroi. truboprov. 8 no.8:10-11 Ag '63. (MIRA 16:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov.

GLAZOV, N.P.

Potential distribution along a pipeline protected by two adjacent cathode units with consideration of the polarized resistance. Gaz. delo no.4:21-25 '64.   (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'-stvu magistral'nykh truboprovodov.

3(5)   PHASE I BOOK EXPLOITATION.   SOV/1546

Glazov, Nikolay Vasil'yevich, and Anatoliy Nikolayevich Glazov

Novyye pribory i metody, primenyayemyye v inzhenerno-geologicheskikh
   izyskaniyakh (New Methods and Instruments Used in Geological Engineering
   Explorations) Moscow, Gosgeoltekhizdat, 1957. 69 p. 3,000 copies printed.

Ed. of Publishing House: B.S. Filippova; Tech. Ed.: S.A. Pen'kova

PURPOSE: This booklet is intended for exploration geologists, geophysicists, and
   hydrologists, as well as drilling, and highway construction engineers.

COVERAGE: This booklet reports on new methods and instruments used in geological
   engineering exploration and testing. The authors consider the use of radioactive
   isotopes as the best and most popular method for improving exploration and test-
   ing techniques, and indicate ways for further increasing the scope of its applica-
   tion. The supplement contains a price list of the various radioactive isotopes
   turned out by Trest Soyuzreaktivsbyt. The authors express their gratitude to
   N.A. Ogil'vi and F.S. Zavel'skiy of VSEGINGEO for their valuable assistance.
   There are 17 diagrams and 43 bibliographic references of which 36 are Soviet,

Card 1/4

New Methods and Instruments (Cont.)   SOV/1546

    5 English, 1 German, and 1 French

TABLE OF CONTENTS:

Card 2/4

New Methods and Instruments (Cont.)   SCV/1546

Bibliography   68

AVAILABLE: Library of Congress

Card 4/4   MM/gmp
                                            5-7-59

GLAZOV, Nikolay Vasil'yevich [deceased]; PODOSHVINA, V.A., red.;
VLASOVA, N.A., tekhn. red.

[Using radioisotopes in engineering studies] Primenenie radio-
aktivnykh izotopov v inzhenernykh izyskaniiakh. Moskva, Gos.
izd-vo lit-ry v oblasti atomnoi nauki i tekhn., 1962. 67 p.
(MIRA 15:3)

(Radioisotopes—Industrial applications)
(Engineering geology)

20667

S/057/61/031/001/012/017
B104/B204

26.2321

AUTHORS: Glazov, O. A.,   Dubovoy, L. V., and Rutkevich, B. N.

TITLE: Excitation of ionic cyclotron oscillations in a plasma by
             electron beams

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 31, no. 1, 1961, 84-86

TEXT: In the high-frequency heating of a plasma by means of ionic cyclo-
tron resonance, the efficacy of the conventional method is considerably
reduced when using larger volumes and stronger magnetic fields. The
excitation of ionic cyclotron oscillations by modulated electron beams
offers certain advantages. The authors suggest using electron beams
modulated in such a manner that the beams of electrons passing through
the plasma form spirals moving along the magnetic field with the velocity
$v_{\shortparallel}$. It is assumed that the magnetic field H_c is applied along the
z-axis. The fundamental frequency of the azimuthal current of this beam
may then be expressed by

$$j_{\varphi} = j_0 \delta(r - r_0) e^{i(k_3 z - \omega t)} \qquad (1),$$

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Excitation of ionic cyclotron ...   S/057/61/031/001/012/017
                                           B104/B204

where $k_z = \omega/v_\parallel$, ω - the modulation frequency of the beam, r, φ, z - the cylindrical coordinates, and r_o - the Larmor radius of an electron. The problem is studied in hydrodynamic approximation; the gravitational force is supposed to be negligibly low, pressure is equal to zero, and the plasma consists of electrons having the mass m_e and charge -e, as well as of one kind of positive ions having the mass m_i and the charge Ze.

Further, the plasma is assumed to be electrically neutral in undisturbed condition, and the density of the plasma is assumed to be sufficiently great. The equations describing the interaction between waves in the frequency range $\omega \lesssim \omega_i$ (ω_i - ionic cyclotron frequency) in the plasma and the electron beam assume the form

$$\operatorname{rot} \mathbf{E} = -\frac{1}{c}\frac{\partial \mathbf{H}}{\partial t}; \quad \operatorname{div} \mathbf{H} = 0,$$
$$\operatorname{rot} \mathbf{H} = \frac{4\pi}{c}(\mathbf{j} + \mathbf{j}^{(\alpha, \alpha)}); \overline{\operatorname{div} \mathbf{j}} = 0; \quad (2)$$

Card 2/4

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Excitation of ionic cyclotron ...

$$\rho_0 \frac{\partial \mathbf{v}}{\partial t} = \frac{1}{c}[\mathbf{j}, \mathbf{H}_0];$$ (3)

$$\mathbf{E} + \left[\frac{\mathbf{v}}{c}, \mathbf{H}_0\right] = \frac{1}{en_0 c}[\mathbf{j}, \mathbf{H}_0].$$ (4)

$$E_r^{\mathrm{I}} = C_1 J_1(k_1 r) e^{i(kz - \omega t)},$$

$$H_z^{\mathrm{I}} = C_1 \frac{ck_1}{i\omega} J_0(k_1 r) e^{i(kz - \omega t)},$$ (5)

As solutions of these differential equations one obtains

for $r < r_0$ and:

$$E_r^{\mathrm{II}} = C_2 H_1^{(1)}(k_1 r) e^{i(kz - \omega t)},$$

$$H_z^{\mathrm{II}} = C_2 \frac{ck_1}{i\omega} H_0^{(1)}(k_1 r) e^{i(kz - \omega t)}.$$ (6)

for $r > r_0$,

$$k_1^2 = \left(\frac{\omega^2}{c^2}\right) \frac{\left(\frac{\Omega^2}{\omega_i^2}\right)^2 \left(\frac{\omega^2}{c^2}\right)^2 - \left[2\frac{k^2c^2}{\omega^2}\cdot\frac{\omega^2}{c^2} + \left(\frac{k^2c^2}{\omega^2}\right)^2\right]\left(\frac{\omega^2}{c^2}\right) + \left(\frac{k^2c^2}{\omega^2}\right)^2}{\left(\frac{\omega^2}{c^2} + \frac{k^2c^2}{\omega^2}\right)\left(\frac{\omega^2}{c^2}\right) - \frac{k^2c^2}{\omega^2}};$$ (7)

where

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Excitation of ionic cyclotron ...   S/057/61/031/001/012/017
                                              B104/B204

Here, $J_n(k_1 r)$ are Bessel functions; $H_n^{(1)}(k_1 r)$ are Hankel functions of first kind; $\omega_i^2 = 4\pi n_i Z^2 e^2 / m_i$ is the plasma ion frequency. The mean energy value in time per unit length of the electron beam is given by

$$W = \frac{2\pi^3 \omega}{c^2} r_0^2 J_1^2(k_1 r_0) j_0^2 \qquad (9).$$

From this formula it follows that at a sufficiently high current density j_0, the intensity of interaction between the electron beam and the plasma is very high. The authors thank K. D. Sinel'nikov for advice and a discussion. There are 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN USSR, Khar'kov
               (Institute of Physics and Technology AS UkrSSR, Khar'kov)

SUBMITTED: July 15, 1960

Card 4/4

ACC NR: AP6024849   SOURCE CODE: UR/0371/66/000/002/0016/0021

AUTHOR: Glazov, O. A. -- Glazovs, O.A.

ORG: Institute of Energetics, AN LatSSR (Institut energetiki AN LatSSR)

TITLE: Magnetohydrodynamic boundary layer for a rotational fluid motion above a
       stationary base

SOURCE: AN LatSSR. Izvestiya, Seriya fizicheskikh i tekhnicheskikh nauk, no. 2,
        1966, 16-21

TOPIC TAGS: magnetohydrodynamics, MHD, MHD boundary layer, MHD generator ~~theory~~,
boundary layer problem, fluid flow property, incompressible fluid

ABSTRACT: The problem of the MHD boundary layer for a rotational motion of an incom-
pressible conducting fluid above a dielectric disk of an infinite radius is considered
and is solved under the following assumptions: a) the rotational velocity, V, of the
fluid out of the boundary layer is given by $V = V_o (r/r_o)^n$ (1), where r_o is an ar-
bitrary value of the radius r, with $V = V_o$ and $n \leqslant 1$; b) the radial velocity
is zero, $U = 0$; c) the external magnetic field at $r = r_o$ is constant. Expressions for the
complete radial flow of the fluid in the boundary layer have been obtained. Conditions
for the validity of the two-dimensional model of a vortex MHD generator have been es-
tablished. Author thanks A.M. Mikhailov for valuable comments.

SUB CODE: 20/   SUBM DATE: 29Dec65/   ORIG REF: 005/   OTH REF: 004

Card   1/1

GLAZOV, O.A.

Automodulation of a spiral electron beam moving through a plasma
in a magnetic field. Zhur.tekh.fiz. 32 no.5:575-578 My '62.
(MIRA 15:7)

1. Fiziko-tekhnicheskiy institut AN USSR, Khar'kov.
                    (Electron beams) (Plasma (Ionized gases))

L 22515-66   EWT(1)/EWP(m)/T-2   IJP(c)

ACC NR: AP6010261   SOURCE CODE: UR/0371/66/000/001/0016/0021

AUTHOR: Glazov, O. A. — Glazova, O.

ORG: Institute of Power Engineering, AN LatSSR (Institut energetiki AN Latviyskoy
SSR)

TITLE: Magnetohydrodynamic flow in a convergence channel

SOURCE: AN LatSSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 1,
1966, 16-21

TOPIC TAGS: magnetohydrodynamics, laminar flow, converging flow,
magnetic field, integral equation, laminar boundary layer

ABSTRACT: A two-dimensional laminar, magnetohydrodynamic flow has been analyzed in
the convergence channel in consideration of uniformity of the flow at the input.
Solutions have been obtained by the one-integral parameter method using the Hartmann
profile in the boundary layer. An effect is shown of the flow convergence on the de-
velopment of the boundary layer for any value of magnetic-field induction. The
values of the current leakage flow in the boundary layer are given. The author thanks
Yu. A. Mikhaylov for his interest in this work and for his valuable remarks. Orig.
art. has: 2 figures and 23 formulas. [Based on author's abstract]   [NT]

SUB CODE: 20/   SUBM DATE: 22May65/   ORIG REF: 005/   OTH REF: 007/

Card 1/1

SOV/96-59-5-8/19

AUTHORS: Salikov, A.P. Candidate of Technical sciences.
Glazov, S.V., Engineer and Klitin N.P., Engineer

TITLE: A New Type of Non-Tubular Regenerator for Gas-Turbine
Installations (Novyy tip netrubchatogo regeneratora
gazoturbinnykh ustanovok)

PERIODICAL: Teploenergetika. 1959 Nr 5. pp 46-50 (USSR)

ABSTRACT: Although regenerators are of the utmost importance in
gas-turbine installations. a good design has not yet
been evolved Tubular regenerators are mostly of large
size and weight, table 1 gives the characteristics of
those used with a number of Soviet and foreign gas
turbines Rotating regenerators are small and light but
are subject to considerable leakages of hot air into the
gas space Because of the need to develop small and
light regenerators the All Union Thermo-Technical Institute
proposed a new ribbed plate type of heating surface which
was used in the construction of regenerators. A sketch
of the ribbed-plate construction is given in Fig 1 and
it is described in the text Bending of the ribs and
welding them to the plates present no special difficulties.
A photograph of a ribbed-plate element manufactured from

Card 1/3

SOV/96-59-5 8/19

A New Type of Non-Tubular Regenerator for Gas-Turbine Installations

cold rolled steel sheets is shown in Fig 2.
Regenerator heating surfaces may be made by assembling
these ribbed plates either as shown in Fig 3a or as
shown in Fig 3b   In each case gas flows through the
channels between one pair of sheets and air between the
next pair of sheets and so on. The arrangement of
headers is sketched in Fig 4   The units can be used to
build up a regenerator heating surface which may be
either rectangular or cylindrical   Regenerators based
on this construction were designed for a gas turbine of
50 MW the operating conditions of which are given. A
sketch of the rectangular form of regenerator is given in
Fig 5; two such units are required for a 50 MW turbine.
The construction of the regenerator is described and
performance and other relevant data are recorded in
Table 2. A cylindrical regenerator in which the air is
delivered to the outside of the cylinder is illustrated
in Fig 6 and the construction is described   If necessary
Card 2/3   the central part of the regenerator may be used to by-pass

SOV/96-59-5-8/19

A New Type of Non-Tubular Regenerator for Gas-Turbine Installations

some of the gas. Performance and other useful data are
given in the second part of Table 2. Other arrangements
are, of course, possible and a sketch of a design with
internal air supply is offered in Fig 7. It is concluded
that ribbed-sheet surfaces have considerable possibilities
for regenerator design. The types of regenerator
described in the article are much cheaper and smaller
than existing types. There is no special difficulty in
manufacturing or assembling the new regenerators. There
are 7 figures, 2 tables and 2 references, 1 of which is
Soviet and 1 English.

ASSOCIATION: Vsesoyuznyy Teplotekhnicheskiy Institut (All-Union
Thermo-Technical Institute)

Card 3/3

SOV/ ... ...-9/20

AUTHORS: Zhirnov, A.I. and Kroll', L.A., Candidates of Technical
Sciences, Glezev, S.V, and St... ...h., Engineers

TITLE   A Large Peak-load Boiler-house for making Heat Supply
to Urban Districts where extensive Housing Construction
is Going on. (Krupnaya pikovaya kotel'naya dlya
ratsional nogo teplosnabzheniya rayonov massovoy zastroyki
gorodov)

PERIODICAL: Teploenergetika 1959, nr 3, pp 36-41 (USSR)

ABSTRACT During the period 1959-1965 there will be a great deal of
new housing construction in a number of towns. The supply
of heat to such housing presents a number of problems. The
provision of individual boilers for each house is expensive
and wasteful. Existing designs of regional boiler-houses
are expensive and are not well-adapted to the eventual use
of district-heating power stations. Area district-
heating power stations to supply the heat and in particular
to cover peak loads, could not be constructed immediately
Such stations should incorporate large cheap water-heating
boilers to cover the peak loads, thereby reducing the cost

Card 1/6

A Large peak-load boiler ____ for ____ Su___/ ____
Districts where extensive housing Construction is ____ on

_____ of the stations by more than ___% Although
suitable ____ __ have ____ develop___ by the A__ ___ __
therm-_echni___ inst____ in ____ with the
___w Branch ___ the Organiza___ ___ instit___ distr__
heating power st____ ____ to be the immed____ ____
because their construction must be ____ part of the
housing. ___ was accordingly necessary to develop large,
cheap water-heating boiler-houses with peak boilers ___
the All-Union therm -Technical Institute design ____
directly ____ of the heating ___ supplying ____ of ___
future district-heating power stat____ __ ____ these
boilers will be the main source of heat ___ ____ later,
when the district-heating stations ____ ___ ____
they will be used to cover peak ____ ____ ____ ____
boiler houses together with the heating ____ __ about
107 000 roubles per kk__ /hr of the heat ____ __ about
20 roubles per square metre of ____ area ___ ___ ____
of heat produced ___ ___ __ 5 ____ ___ ___ /___ ____
Card 2/6 is considerably ____ than ____ ____ ____ ____

A Large Peak-load Boiler House for Regional Heat Supply in Urban
Districts where Extensive Housing Construction is Being Undertaken

supply. The All-Union Trans. Technical Institute has
developed the design for such a peak water-heating boiler
installation and together with the Moscow Planning
institute has compared the economics of a number of diff-
erent methods of heat supply. A detailed description of
the boiler house is then given, and the general arrange-
ment is illustrated in figure 1. It will contain three
water-heating boilers type PTV-100, each with a thermal
output of 100 Mkcal/hr, a furnace volume of 846 m³, a
radiation heating surface of 390.7 m², a convective
heating surface of 2,780 m², and a mean efficiency of
93.8%. The thermal output of the boiler house suffices
for a typical district with a total housing area of
1,565,000 m². For smaller sites two boilers type PTV-100
or two or three similar boilers type PTV-50, may be used.
The boiler house is designed to burn natural gas and will
thus meet the requirements of Moscow, Kiev, Leningrad,
Kharkov, Rostov-na-Don, Lvov and a number of other towns.
Stand-by fuel-oil burning equipment is provided, increasing
Card 3/6   the cost of the boiler house by about 30%. As and fail-

A Large Peak-load boiler house for additional Heat Supply to great
Districts where Extensive housing construction is going in

area are not likely to last more than a few years, this
equipment may not be necessary. As will be seen from
the arrangement of system given in drawing 1, the station
has water-treatment equipment ... system purge ... not
until the ... action is ... is a ... water
... the ... house is only covering peak ...
... may be removed; alternatively ...
... equipment ... ...
... stations may be ... ... are ...
the water-treatment plant ... boiler ...
type ... stores are provided for the necessary chemicals.
The gas and fuel ... ...
described ... type PTVM-30 ... natural
draught and ... ...
common ... ...
A central control panel is provided. When fuel oil is
burned special measures ... ... of contamination
of the convective surfaces. Arrangements ... ...
Card 4/6   iver caustic magnesite or ... ...

A Large Peak-load boiler ..... for ...... in Supply ......
District ..... extensive H .. ap ...... t .... ,

upper part of the furnace .. .. to m... the separate
fr.... .. the water returned from the ....
system is a large ... p.... .. has been .. ..
heated by circul .... hot water ... . to ...
me.. to wash the con........ surfaces of the boiler with
hot water, to remove deposits. A thermal ..... curve for
Moscow ..... in Figure ... shows th.. the boiler house
will operate for only .b .. 80 hours per year with the full
thermal load of ... .k ..../.. and that the .... would be
above 60% for .... more than 460 hours per year. During
the summer the l... would not exceed ... ... the ....
of one boiler ... .. this period can safely be used for
general overhaul. when the boiler house is covering only
peak, ... this .... output will still further be reduced even
t.. .... is .... in the .... When this
occurs it will be possible to use only two boilers, keeping
the third in reserve. it has been .... the
boilers w... .. hydro-dyn .... water-.... w
rate ... . the .....

Card 5/6

A Large Peak-load boiler house for additional heat supply to urban Districts where Excessive heating ...

ASSOCIATION: Vsesoyuznyy teplotekhnicheskiy institut (All-Union Thermo-technical Institute)

Card 6/6

GLAZOV, Sergey Vasil'yevich; BARSKAYA, Galina Romanovna; GOFMEKLER, V.A.,
red.; ROMANOVA, Z.A., tekhn. red.

[Protect yorself against injuries] Beregi sebia ot travm. Moskva,
Medgiz, 1961. 37 p.   (MIRA 14:11)
            (FIRST AID IN ILLNESS AND INJURY)
               (INDUSTRIAL SAFETY)

GLAZOV, V., polkovnik; ZHELTIKOV, I., polkovnik

Growing might of the Soviet Armed Forces. Komm.Vooruzh.Sil 2
no.6:26-35 Mr '62.   (MIRA 15:3)
                        (Russia--Armed forces)

BARDIN, V., DOK.

Principles of the methods of fighting. Komm. Vooruzh. Sil.

EXCERPTA MEDICA Sec 8 Vol 12/8 Neurology Aug 59

3914. THE CONTENT OF PHENOLS AND CYCLIC AMINO-ACIDS IN THE
BLOOD LEUCOCYTES OF SCHIZOPHRENIC PATIENTS (Russian text) -
Glazov V. A. - SBORN. NAUCH. TRUD. DAGEST. MED. INST. 1956, 6
(138-139)

Histochemical investigations of the leucocytes of the blood of 50 schizophrenia
patients were conducted. In schizophrenia patients the quantity of segmented leuco-
cytes, containing tyrosine, histidine, phenylalanine and tryptophan reached 30% and
higher; in psychologically healthy individuals the number of segmented leucocytes
containing these amino-acids did not exceed 4-10%. The amiro-acids were dis-
played most often in cells with bilobate nuclei (cells at the stage of amitotic divi-
sion). A lowering of the number of leucocytes containing tyrosine and histidine
was observed in the presence of improvement of the general state of the patients.
In the majority of schizophrenia patients there was encountered, along with the
content of tyrosine and histidine, a large quantity of protein-free phenolic granules,
most often at the periphery of the cell. The rise in the content in the white blood
elements of histidine, tyrosine and phenols corresponds to the raised content in the
blood plasma of these patients of tyrosine and histidine, and in the whole blood of
free phenols also.

(S)

GLAZOV, V.A.

Leukocyte sulfhydryl content in schizophrenic patients. Zhur.
nevr. i psikh. 59 no.4:410-415 '59.   (MIRA 12:6)

1. Kafedra psikhiatrii (zav. - prof.V.A.Glazov) Dagestanskogo
meditsinskogo instituta, Makhachkala.
            (SCHIZOPHRENIA, blood in,
                leukocyte sulfhydryl cpds. (Rus))
            (SULFHYDRYL COMPOUNDS, inblood,
                in leukocyte in schizophrenia (Rus))
            (LEUKOCYTES,
                sulfhydryl cpds. in schizophrenia (Rus))

GLAZOV, Vis...

GLAZOV, V.M.

DETERMINATION OF LIMITED SOLUBILITY SURFACE
OF A TRIPLE SYSTEM BY THE MICROSOLIDIFICATION

3

USSR/Thermodynamics, Thermochemistry, Equilibria, Physico-Chemical   B-
         Analysis, Phase Transitions

Abstract : The aluminum corner of the state graph of Al - Ta was inves-
         tigated by the microstructural, macrostructural, thermal,
         and x-ray refraction methods. Alloys containing from 0.01
         to 5.1% by weight of Ta were homogenized at 530° during a
         week's time and, after that, were annealed in steps at tem-
         peratures from 200° to 630° 40 hours at each temperature.
         The dependence of the number of grains per sq. cm of the sur-
         face of a macroscopic slide, of the microscopic hardness of
         crystals of the solid solution and the macroscopic hardness on
         the alloy composition were studied. A heat effect answering
         a non-variant transformation was noted at 669°. According to
         the x-ray refraction analysis, the maximum solubility of Ta
         in Al changes from 0.24% at 630° to 0.15% at 20°. The outline
         of the aluminum side of the state graph of Ta - Al is proposed,
         the graph containing the peritectic reaction $TaAl_2 + L \rightleftharpoons \alpha$ at
         669° and a steeply falling curve of maximum solubility of Ta in Al.

GLAZOV, V.M.; VIGDOROVICH, V.N.; KOROL'KOV, G.A.

Effect of various factors on the results of microhardness measure-
ments in the investigation of state diagrams. Zav.lab.22 no.11:
1343-1348 '56.   (MLRA 10:2)

1. Institut metallurgii Akademii nauk SSSR imeni A.A.Baykova i
Moskovskiy institut tsvetnykh metallov i zolota imeni M.I.Kali-
nina.
          (Metals---Testing)

137-1958-2-2643

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 69 (USSR)

AUTHORS: Mal'tsev, M. V , Livanov, V. A., Kuznetsov, K. I., Glazov, V. M.

TITLE: Modifying the Structure of Ingots of Industrial Aluminum Alloys
(Modifitsirovaniye struktury slitkov promyshlennykh alyuminiyevykh
splavov)

PERIODICAL: V sb.: Metallurg. osnovy lit'ya legkikh splavov. Moscow,
Oborongiz, 1957, pp 140-154

ABSTRACT: A detailed study was made of the effect had by modification on
the mechanical and technical properties of Al alloys. Tested
were a D16 (aircraft Duralumin) alloy composed of 4.5 percent
Cu, 1.52 percent Mg, 0.6 percent Mn, 0.15 percent Fe, and
0.25 percent Si and an AMts (aircraft aluminum) alloy composed
of 1.62 percent Mn, 0.26 percent Fe, and 0.2 percent Si, the
rest being Al. The alloys were prepared from industrial Al waste
(mark AO), electrolytic Cu, Mg, and an Al-Mn alloying element
Ti was added as the modifying agent The smelting was done in an
SAN-type electric furnace with a capacity of up to 2,000 kg The
ingots were semicontinuous-cast The basic tests were made on
Card 1/2   round ingots 170 mm in diameter. The following emerged from

137-1958-2-2683

Modifying the Structure of Ingots of Industrial Aluminum Alloys

the tests: 1) the most intensive size reduction of the grain was observed with Ti concentrations of 0.05-0.1 percent; for better assimilation of the Ti by the alloy the former had to be introduced as a diluted alloying element (with a 3-4 percent Ti content) at the beginning of smelting, along with the basic charge; it was not desirable to superheat the modified alloy to temperatures > 740-760°; 2) as a result of the double smelting the Ti content dropped by more than 0.01 percent; 3) the modification interfered to some degree with liquation within the ingot; 4) the greatest improvement in the mechanical properties was observed when Ti concentrations were such as to produce maximum size reduction of the grain (i.e., 0.07-0.1 percent).

G.S.

1. Aluminum alloys—Modification

Card 2/2

129-7-4/16

AUTHOR: Glazov, V.M. and Korol'kov, G.A.

TITLE: Two mechanisms of micro-heterogenisation of crystals of the solid solution in two phase alloys. (Dva mekhanizma mikrogeterogenizatsii kristallov tverdogo rastvora v dvukhfaznykh splavakh).

PERIODICAL: "Metallovedenie i Obrabotka Metallov" (Metallurgy and Metal Treatment), 1957, No.7, pp.18-23 (U.S.S.R.)

ABSTRACT: Bochvar, A. A. and Zhdayeva, O. S. (1) express the view that during crystallisation of biphase alloys finer particles of the second phase become located in the inter-axial spaces of the solid solution dendrites producing thereby a heterogeneity of the second order. Relatively short duration (1) and even long duration (2-5) homo-genisation does not eliminate the influence of these particles. Complication of the structure of the solid solution grains in biphase alloys is not only due to heterogenisation caused by dendritic crystallisation but also to heterogenisation caused by decomposition of the solid solution resulting from changes in the solubility as the temperature becomes lower; this should also lead to a change in the hardness of the crystals. However, it is not known how large the relative role is of each of

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Two mechanisms of micro-heterogenisation of crystals of the solid solution in two phase alloys. (Cont.) 129-7-4/16

these mentioned complications of the structure of the crystals of the solid solution in biphase alloys. In this paper the authors attempt to prove experimentally and theoretically the existence of two mechanisms of micro-heterogenisation of crystals of the solid solution in biphase alloys. For the experiments the system Al-Cu was chosen; this system is convenient because the solubility therein changes relatively slowly between room temperature and 300 C, whilst a further increase of the temperature brings about a sharp increase in the solubility. The experiments were carried out with aluminium alloys containing 0.5; 1; 1.5; 2; 3; 4; 5; 6; 8; 10; 15; 20 and 25% Cu.   Ingots of 100 g each were produced, deformed by 20% and from these, metallographic specimens were prepared which were subsequently annealed at 500 C for nine hours for the purpose of producing a state of equilibrium of the solid solution, then they were cooled in the furnace to 400 C, held at that temperature for 100 hours and following that were quenched in water. The surfaces of the obtained specimens were then etched and micro-hardness measurements were made. Following that, the specimens were again placed

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into a 400 C furnace and heated for 650 hours for eliminating the influence of micro-heterogenisation.   After further quenching in water and measurement,   the specimens were again subjected to heat treatment.   The results are entered in Fig.3 which gives the relation between the microhardness of the solid solution crystals and their composition on occurrence of the mechanism of micro-heterogenisation produced by decomposition of the solid solution into biphase alloys.   It is concluded on the basis of the relation between the microhardness and the composition of alloys of the system   Al-Cu, curve 2 Fig.2, that homogenisation for 650 hours at 400 C eliminates the influence of micro-heterogeneity in biphase alloys of the system   Al-Cu, presumably as a result of coagulation of the particles of the second phase.   Therefore, the microhardness of the solid solution crystals in biphase alloys will remain constant with increasing Cu content, owing to the constant composition of these crystals in absence of any influence of isolated spheroidised inclusions.   The results entered in Fig.3 indicate that repeated heat treatment (heating and slow cooling) leads

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to the appearance of only a single mechanism of hetero-
genisation of solid solution crystals, namely, one which
is associated with the separation of submicroscopic
particles of the second phase from the lattice; this
permits observation of the phenomena in the pure form and
establishment of the relative influence of both processes in
biphase alloys located, from the point of view of
composition, to the right of the limit solubility point
of the diagram of state at the eutectic temperature.   In
alloys containing over 15% Cu heterogeneity of the second
order will predominate, whilst in alloys containing less
than 15% Cu micro-heterogenisation will predominate
owing to the decomposition of the solid solution.   In the
case of non-equilibrium crystallisation, the given
relations will shift to the left.   In this case hetero-
geneity of the second order will predominate in biphase
alloys, which is linked with crystallisation.   The results
seem to prove conclusively the existence of two mechanisms
of micro-heterogenisation of solid solution crystals in
biphase alloys, of such composition which, in the diagram
of state, are located to the right of the point of limit

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Two mechanisms of micro-heterogenisation of crystals of the solid solution in two phase alloys. (Cont.)   129-7-4/16

saturation at the eutectic temperature. There are three figures, no tables, six references, five of which are Slavic.

ASSOCIATION: Institute of Metallurgy imeni A. A. Baykov, Ac.Sc., U.S.S.R. and Institute of Non-Ferrous Metals and Gold imeni N. I. Kalinin. (Institut Metallurgii imeni A.A.Baykova AN SSSR i Institut Tsvetnykh Metallov i Zolota imeni M. I. Kalinina).

AVAILABLE:

Card 5/5

GLAZOV, V M.

24-8-12/34

AUTHORS: Glagoleva, N. N., Glazov, V.M. and Korol'kov, G.A.(Moscow).

TITLE: On the character of the non-variant transformation in the system Al-Ti. (O kharaktere nonvariantnogo prevrashcheniya v sisteme alyuminiy-titan).

PERIODICAL: "Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk" (Bulletin of the Ac.Sc., Technical Sciences Section), 1957, No.8, pp. 89-94 (U.S.S.R.)

ABSTRACT: Information published so far is inadequate for constructing an accurate diagram of state of the aluminium end of Al-Ti alloys. Obtaining of such an accurate diagram is of great importance particularly in conjunction with inoculation of aluminium and aluminium alloys with titanium. In the work described in this paper the authors aimed at determining the character of the invariant equilibrium and to determine the solubility of the titanium in aluminium in the solid state at various temperatures. For this purpose alloys were prepared containing 0.02, 0.04, 0.07, 0.1, 0.14, 0.17, 0.20, 0.25, 0.30, 0.50, 1.0, 2.0, 4.0 wt.% titanium, using 99.998% Al and an Al-Ti alloy containing 4 wt.% Ti as starting materials. The alloys were manufactured in corundum crucibles in electric furnaces and were cast into chill moulds. In the experiments the authors considered it convenient to use the method of Chokhral'skiy of "drawing" specimens of variable composition

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24-8-12/34

On the character of the non-variant transformation in the system Al-Ti. (Cont.)

as described in a paper by Petrov, D. A. and Bukhanova, A.A. (13) in which the authors have determined unequivocally the character of the invariant transformation in the system Al-Mn. In the here described experiments, the 90 mm long specimens of variable composition were drawn at a speed of 0.3 mm/min from the melt containing 0.1 to 0.12 wt.% Ti. Investigation of the micro-structure showed that the entire drawn specimen is a single-phase one and the micro-hardness values along it are given in the graph, Fig.3, p.91. On the basis of the obtained results it is concluded that the Al end of the diagram of state of Al-Ti alloys is of the peritectic type. Results of macro and thermal analysis confirm that the peritectic point is located at 0.19 wt.% Ti and the peritectic transformation $L + TiAl_3 \rightleftarrows \alpha$ takes place at 665 C. The solubility of Ti in Al was determined at various temperatures and the line of limited solubility was plotted. Extrapolation of this line to the temperature of the peritectic horizontal indicates that the limit saturation of titanium in aluminium is about 0.26 to 0.28 wt.% Ti. On the basis of all the available data a variant of the Al-Ti diagram of state is plotted in

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24-8-12/34

On the character of the non-variant transformation in the system Al-Ti. (Cont.)

Fig.7, p.93, which should be considered as being correct. There are 7 figures and 19 references, 11 of which are Slavic.

SUBMITTED: January 12, 1957.

AVAILABLE: Library of Congress

Card 3/3

GLAZOV, (M).

24-9-20/33

AUTHORS: Glazov, V. M., Zakharov, M.V. and Stepanova, M. V. (Moscow)

TITLE: Influence of the phase composition on the heat resistance of alloys of the system copper-chromium-zirconium. (Vliyaniye fazovogo sostava na zharoprochnost' splavov sistemy med'-khrom-tsirkoniy).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.9, pp. 123-126 (USSR)

ABSTRACT: Development of new high temperature alloys is based on studying the diagram of state and mainly the diagram of composition-heat resistance, which is the basis of the modern physico-chemical theory of heat resistance. Of particular interest are such diagrams relating to complex metallic systems, containing three, four or more components. In this paper the copper angle of the diagram, copper-chromium-zirconium, is investigated and the influence is studied of the phase composition on the heat resistance of chromium-zirconium bronzes. In earlier work (Refs.2-4) the authors established, on the basis of microscopic and thermal analyses and measurement of the microhardness of the individual structural components, that the copper angle of the copper-chromium-zirconium diagram (up to 3.5% Cr and 3.5% Zr) is characterised in the solid state by

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Influence of the phase composition on the heat resistance of alloys of the system copper-chromium-zirconium.

the six-phase ranges α; $(\alpha + Cr)$; $(\alpha + Cr + Cr_2Zr)$; $(\alpha + Cr_2Zr)$; $)\alpha + Cr_2Zr + Cu_3Zr)$; $(\alpha + Cu_3Zr)$ and that in the ternary system a quasi-binary section $Cu-Cr_2Zr$ exists which represents the binary diagram of the eutectic type with a eutectic transformation temperature of $1020^\circ C$; this section sub-divides the complex ternary diagram into two elementary ternary diagrams of the eutectic type with limited solubility in the solid state. Furthermore, they established that an area exists of uniform solid solutions of Cr and Zr in copper at various temperatures. The heat resistance (long duration hardness) of Cu-Cr-Zr alloys was investigated along three polymetric cuts: the quasi-binary section $Cu-Cr_2Zr$, the section of the ternary diagram for a variable Zr content and a constant (0.5%) Cr content and, finally, the section of the ternary diagram with a variable Cr content and a constant (0.5%) Zr content. All these sections of the diagrams are reproduced in the top part of the Figs.2, 3 and 4. For evaluating the heat resistance of the alloys, the 30 sec and 60 min hardness values were determined at

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Influence of the phase composition on the heat resistance of alloys of the system copper-chromium-zirconium.

the temperatures 600 and 800°C which represent the most frequent pertaining operating temperatures of Cu-Cr-Zr alloys. The results of the comparative heat resistance are given on the same graphs and these give a lucid picture of the influence of the phase composition on the heat resistance of the Cu-Cr-Zr alloys. Hardness tests at room temperature (given in the Table, p.125) show that the hardness increases continuously with increasing degree of alloying. On the basis of the results it is concluded that the most heat resistant ternary alloys of this system are those within the phase range $\alpha + Cr_2Zr$, i.e. those which are located on the quasi-binary $Cu \stackrel{=}{} Cr_2Zr$ section. Within this phase range the heterogeneous alloys containing $0.8-1.2\%$ Cr_2Zr proved to have the highest heat resistance. There are 4 figures, 1 table and 5 Slavic references.

SUBMITTED: April 19, 1957.

AVAILABLE: Library of Congress.

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24-10-10/28

AUTHORS: Glazov, V. M., Mirgalovskaya, M.S. and Petrakova, L. A.
(Moscow)

TITLE: New semi-conductor materials with a chalcopyrite structure.
(Novyye poluprovodnikovyye materialy so strukturoy
khalkopirita)

ABSTRACT: The aim of the here described work was to produce and
investigate twelve compounds of the ABX_2 type
where A - Cu, Ag; B - Al, Ga, In; X - Se, Te.
The synthesis of the compounds was effected directly by
melting the elements inside evacuated and sealed quartz
ampules. The compounds containing aluminium were
synthesized in graphite crucibles with a lid which were
also placed into evacuated and sealed quartz ampules. It
was found that all the compounds had a similar structure;
substitution of copper by silver produced on the X-ray
pictures a splitting of the lines which is attributed to
an appreciable change in the ratio of the lattice parameters.
The results of determination of the lattice parameters of
the compounds by means of X-ray structural analysis are
entered in the Table, p.70 for twelve compounds. The

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26-10-10/26

New semi-conductor materials with a chalcopyrite structure.

temperature dependence of the electric conductivity of
a number of tested compounds is plotted in semi-
logarithmical coordinates in the graphs, Figs.2-5. Thermo
e.m.f. data indicate that all the compounds have a hole
type conductivity with the exception of $AgInSe_2$, which
has an electron conductivity. It is concluded that
synthesized compounds of the chalcopyrite type are
typical semi-conductors and the obtained results indicate
that they are of considerable interest from the point of
view of semi-conductor development.
There are 5 figures, 2 tables and 2 references, one of
which is Slavic.

SUBMITTED: July 10, 1957.

AVAILABLE: Library of Congress.

Card 2/2

3.-12-34/71

AUTHORS: Glazov, V.L., Glagoleva, N.N.

TITLE   The Investigation of the Microhardness of a Solid Solution With
              Respect to the Composition of Three-Component Systems in the Case
              of a Deviation of Sections From the Conoid (Issledovaniye
              mikrotverdosti tverdoge rastvora v zavisimosti ot sostav splava
              v trekhkomponentnykh sistemakh pri otklonenii razrezov ot konnod).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1481-1484 (USSR)

ABSTRACT: In the introduction it is said that the method suggested by the
              authors must be preferred to the microscopical method and to the
              radiostructural analysis for the determination of the surfaces of
              solubility limits in three-component systems. As a result of re-
              search work it was, however, found that already in the two-compo-
              nent system the dependence of microhardness on composition is due
              also to the microheterogenization of the crystals of the solid solu-
              tion, which renders application of the method more difficult. The
              following task is intended to be solved by this paper: To determine
              the effect produced by deflections from the respective conoid upon
              the character of the isotherms of the "Microhardness of composition"
              in the three-component system as well as the part played by indi-

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With Respect to the Composition of Three-Component Systems
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vidual components in the course of the hardening of three-component
solid solutions. In the chapter entitled: "Experimental Part" three
sections of the system Al-Mg-Si and six sections of the system
Cu-Zn-Sn, which are here represented in form of drawings,are invest-
igated. A total of 75 systems was investigated. The respective com-
ponents of the systems concerned were melted in a graphite crucible
and poured off in chilled casting molds. The samples obtained were
deformed and then annealed: Cu-Zn-Sn at 500° and Al-Mg-Si at 550°
(during 75 hours). The samples, which were put up, were examined as
to their microhardness. In the chapter "Analysis and Evaluation of
Results" there follows the exact description and explanation of the
isotherms of the microhardness of the individual sections of the
samples, which are graphically represented here. The results obtained
led to the following conclusion: In spite of the deflection of the
sections from the corresponding conodi in the two systems mentioned
(Al-Mg-Si and Cu-Zn-Sn) the position of the point of saturation
can, at a certain temperature, be read off from the distinct salient
point of the isotherms. In this connection it is said that, if the

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respective conoids are unknown, the possibility exists of determin-
ing their position according to the above mentioned curves and by
taking account of sectional orientation. There are 7 figures, and
16 references, 15 of which are Slavic.

ASSOCIATION: Metallurgical Institute AN USSR imeni A.A.Baykov and Moscow
Institute for Nonferrous Metals and Gold imeni M.I.Kalinin
(Institut metallurgii im. A.A.Baykova Akademii nauk SSSR. Moskovskiy
institut tsvetnykh metallov i zolota im. M.I.Kalinina).

AVAILABLE: Library of Congress

Card 3/3   1. Compositions-Microhardness determination-Methods

GLAZOV, V.M.; VIGDOROVICH, V.N.; KOROL'KOV, G.A.

Applicability of microhardness testing to the investigation of
binary and ternary equilibrium diagrams of metallic systems
[with summary in English]. Zhur.fiz.khim.31 no.8:1891-1897 Ag '57
(MIRA 10:12)

1. AN SSSR, Institut metallurgii im. A.A.Baykova i Institut
tsvetnykh metallov i zolota im. M.I.Kalinina, Moskva.
(Hardness)   (Metals)   (Phase rule and equilibrium)

(Gla...V. M.)

AUTHORS: Glagoleva, N. N., and Glazov, V. M. (Moscow). 24-1-21/26

TITLE: On certain relations governing the dependence of the micro-hardness of the solid solution crystals on the composition of the alloy in a three-component system. (O nekotorykh zakonomernostyakh zavisimosti mikrotverdosti kristallov tverdogo rastvora ot sostava splava v trekhkomponentnykh sistemakh).

PERIODICAL: Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk, 1958, No.1, pp. 130-134 (USSR).

ABSTRACT: As has been shown by one of the authors and his team in earlier work (Refs.1-3), the micro-hardness method can be successfully used for determining the surfaces of limited solubility in three-component systems. However, on changing from a single-phase to a two-phase area of the diagram of state of a three-component system, the composition remains constant only for "connodal" cuts. If a given cut deviates one way or the other from the connodal one, the concentration of the solid solution in the two-phase alloy will increase or decrease depending on the curvature of the solubility isotherm. The dependence of the micro-hardness on the composition will, in this case, be a simple function of the composition of

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24-1-21/26

On certain relations governing the dependence of the micro-hardness of the solid solution crystals on the composition of the alloy in a three-component system.

the solid solution since, depending on the character of the solubility isotherm, a general reduction of the concentration of the solid solution will lead to an increase or decrease of the concentration of one of the components in accordance with the degree of deviation from the connodal position, see Fig.1, p.130. It is important to know which of the components of a ternary solution will be more intensive in increasing its strength and to what extent the hardening effect of the individual components in binary systems are inter-related with their hardening effects in ternary systems and also to what extent a change in the ratio of the alloying components in a ternary solution of a two-phase alloy affects the character of the relation between the composition isotherm and the micro-hardness in the case of deviations of the cuts from the connodal towards one side or another. This paper is devoted to investigating these problems. The experimental part included study of the dependence of the micro-hardness on the composition of the solid solution in the systems Al-Mg, Al-Si, Al-Mg-Si, Al-Cu, Card 2/4 Al-Mg, Al-Cu-Mg, Cu-Zn, Cu-Sn, Cu-Zn-Sn. The dependence